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09/715,069	11/20/2000	Hermann Kuenzner	951/49289	8872

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EXAMINER

VU, KIEU D

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2173	

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Please find below and/or attached an Office communication concerning this application or proceeding.



### **DETAILED ACTION**

1. This Office action is responsive to the Request for Continued Examination (RCE) filed under 37 CFR §1.53(d) for the instant application on 07/27/06. Applicants have properly set forth the RCE, which has been entered into the application, and an examination on the merits follows herewith.

2. Claims 1-8, 15-22, and 31-38 are pending. Claims 9-14 and 23-30 had been canceled.

### ***Claim Objections***

3. Claims 35-38 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 35 fails to further limit the limitation "two sets of information" of independent claim 15 since the limitation "distance range said motor vehicle can travel before exhausting an amount of fuel in said motor vehicle and a distance said motor vehicle has to travel to reach an entered destination" is already recited in lines 9-12 of claim 15.

Claim 36 depends on claim 35 and is objected for the same reason.

Claim 37 fails to further limit the limitation "two sets of information" of independent claim 15 since the limitation "average fuel consumption of said motor vehicle and a current fuel consumption of said motor vehicle" is already recited in lines 12-13 of claim 15.

Claim 38 depends on claim 37 and is objected for the same reason.

***Claim Rejections - 35 U.S.C. § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghitea, Jr. et al ("Ghitea, Jr. ", U.S.P 5693876) and Menig et al ("Menig", U.S.P 6289332).

Regarding claims 1 and 5, Ghitea, Jr. teaches a process and an indicator for visually display of fuel consumption in motor vehicles (see figures 5 and 7) with an electronically controllable display (72), where the display is controlled in such a manner that at least two sets of information (see figure 5, see lines 150 and 152 of figure 7), having an interrelated effect are displayed (col 9, lines 49-62). Ghitea, Jr. differs from the claims in that Ghitea, Jr. does not teach that the two sets of information are displayed at the same place alternating with the same type of graphic wherein a graphical difference between said at least two sets of information is representative a third set of information. However, such feature is well known in the art. For example, Menig teaches an integrated message display system for a vehicle wherein two sets of information are displayed at the same place alternating with the same type of graphics

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wherein a graphical difference between said at least two sets of information is representative a third set of information (for example, information on screen 910 and information on screen 908 are displayed on the same display screen 120 alternating in response to detection of predetermined vehicle condition) (see Fig. 9) (col 12, lines 24-47) with the advantage being to provide more messages (current message, function message, system failure message, or danger ahead message; col 2, lines 11-29) to the user on a single display screen (triangle in screen 910 displays the object detection indicator 906 as the first set of information, triangles in screen 908 displays creep alert signal as the second set of information, from the two screens 910 and 908, the system informs the driver a third set of information which is an object is less than 15 feet ahead and the truck speed is less than 2 mph) (col 12, lines 42-48) . It would have been obvious to one of ordinary skill in the art, having the teaching of Ghitea, Jr. and Menig before him at the time the invention was made, to modify Ghitea, Jr. 's fuel consumption to include displaying two messages alternately at the same place with the same type of graphic (see screen 910 and 908 in Fig. 9) taught by Menig with the motivation being to make available more information at a single display screen (Menig; col 2, lines 11-29).

Regarding claims 2 and 6, Ghitea, Jr. teaches the use of bar graph (Fig. 5) to display information.

Regarding claims 3-4 and 7-8, Ghitea, Jr. teaches the use of different colors (color coding) to display different information. See col. 11, lines 54-59.

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6. Claims 15-22, 31-32, and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghitea, Jr. et al ("Ghitea, Jr. ", U.S.P 5693876) and Menig et al ("Menig", U.S.P 6289332) and Hosaka et al ("Hosaka", USP 4551803).

Regarding claims 15 and 19, Ghitea, Jr. teaches a process and an indicator for visually display of fuel consumption in motor vehicles (see figures 5 and 7) with an electronically controllable display (72), where the display is controlled in such a manner that at least two sets of information (see figure 5, see lines 150 and 152 of figure 7), having an interrelated effect are displayed (col 9, lines 49-62). Ghitea, Jr. differs from the claims in that Ghitea, Jr. does not teach that the two sets of information are displayed at the same place alternating with the same type of graphic wherein a graphical difference between said at least two sets of information is representative a third set of information. However, such feature is well known in the art. For example, Menig teaches an integrated message display system for a vehicle wherein two sets of information are displayed at the same place alternating with the same type of graphics wherein a graphical difference between said at least two sets of information is representative a third set of information (for example, information on screen 910 and information on screen 908 are displayed on the same display screen 120 alternating in response to detection of predetermined vehicle condition) (see Fig. 9) (col 12, lines 24-47) with the advantage being to provide more messages (current message, function message, system failure message, or danger ahead message; col 2, lines 11-29) to the user on a single display screen (triangle in screen 910 displays the object detection indicator 906 as the first set of information, triangles in screen 908 displays creep alert

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signal as the second set of information, from the two screens 910 and 908, the system informs the driver a third set of information which is an object is less than 15 feet ahead and the truck speed is less than 2 mph) (col 12, lines 42-48) . It would have been obvious to one of ordinary skill in the art, having the teaching of Ghitea, Jr. and Menig before him at the time the invention was made, to modify Ghitea, Jr. 's fuel consumption to include displaying two messages alternately at the same place with the same type of graphic (see screen 910 and 908 in Fig. 9) taught by Menig with the motivation being to make available more information at a single display screen (Menig; col 2, lines 11-29). Ghitea, Jr. and Menig do not teach that two sets of information relate to a distance range said motor vehicle can travel before exhausting an amount of fuel in said motor vehicle and a distance said motor vehicle has to travel to reach an entered destination. However, such feature is known in the art as taught by Hosaka. Hosaka teaches that display device 366 alternatively shows vehicle travel distance and fuel consumption (Fig. 3) (col 8, lines 24-29) (col 9, lines 28-29). It would have been obvious to one of ordinary skill in the art, having the teaching of Ghitea, Jr., Menig, and Hosaka before him at the time the invention was made, to include alternative showing vehicle travel distance and fuel consumption taught by Hosaka in the visual display taught by Ghitea, Jr. and Menig so that vehicle travel distance and fuel consumption can be graphically displayed to drivers in a single display screen. The graphic display of vehicle travel distance and fuel consumption enables drivers to quickly and easily recognize these parameters at glance.

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Regarding claims 16 and 20, Ghitea, Jr. teaches the use of bar graph (Fig. 5) to display information.

Regarding claims 17-18 and 21-22, Ghitea, Jr. teaches the use of different colors (color coding) to display different information. See col. 11, lines 54-59.

Regarding claims 31 and 35, Ghitea, Jr. and Menig do not teach that two sets of information relate to an amount of fuel in said motor vehicle and a distance range said motor vehicle can travel before exhausting said amount of fuel. However, such feature is known in the art as taught by Hosaka. Hosaka teaches that display device 366 alternatively shows vehicle travel distance and fuel consumption (Fig. 3) (col 8, lines 24-29) (col 9, lines 28-29). It would have been obvious to one of ordinary skill in the art, having the teaching of Ghitea, Jr., Menig, and Hosaka and before him at the time the invention was made, to include alternative showing vehicle travel distance and fuel consumption taught by Hosaka in the visual display taught by Ghitea, Jr. and Menig so that vehicle travel distance and fuel consumption can be graphically displayed to drivers in a single display screen. The graphic display of vehicle travel distance and fuel consumption enables drivers to quickly and easily recognize these parameters at glance.

Regarding claims 32 and 36, Hosaka teaches displaying information that relates to whether the amount of fuel is enough to reach the entered destination (col 9, lines 28-29).

7. Claims 33-34 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghitea, Jr. et al ("Ghitea, Jr. ", U.S.P 5693876) and Menig et al ("Menig", U.S.P 6289332) and Cerruti (European Patent Application 0091887).



Regarding claims 33 and 37, Ghitea, Jr. and Menig do not teach that two sets of information relate to an average fuel consumption of said motor vehicle and a current fuel consumption of said motor vehicle. However, such feature is known in the art as taught by Cerruti. Cerruti teaches visual display zone 5 presents signals corresponding to the fuel consumption and average fuel consumption (page 3, lines 16-19). It would have been obvious to one of ordinary skill in the art, having the teaching of Ghitea, Jr., Menig, and Cerruti before him at the time the invention was made, to include alternative showing fuel consumption and average fuel consumption taught by Cerruti in the visual display taught by Ghitea, Jr. and Menig so that fuel consumption and average fuel consumption can be graphically displayed to drivers in a single display screen. The graphic display of fuel consumption and average fuel consumption enables drivers to quickly and easily recognize these parameters at glance.

Regarding claims 34 and 38, Cerruti teaches that the information relates to whether the average fuel consumption is increasing or decreasing (page 3, lines 16-19).

8. Applicant's arguments filed 07/27/06 have been fully considered but they are not persuasive.

Applicant argues that the cited reference, taken alone or in combination, fail to teach the limitation "a graphical difference between said at least two said of information is representative a third set of information" and that Meing does not teach "two sets of information displayed at the same place alternating with the same type of graphics". The Examiner respectfully disagrees. Meing teaches an integrated message display system for a vehicle wherein two sets of information are displayed at the same place alternating

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with the same type of graphics wherein a graphical difference between said at least two sets of information is representative a third set of information (for example, information on screen 910 and information on screen 908 are displayed on the same display screen 120 alternating in response to detection of predetermined vehicle condition) (see Fig. 9) (col 12, lines 24-47) with the advantage being to provide more messages (current message, function message, system failure message, or danger ahead message; col 2, lines 11-29) to the user on a single display screen (triangle in screen 910 displays the object detection indicator 906 as the first set of information, triangles in screen 908 displays creep alert signal as the second set of information, from the two screens 910 and 908, the system informs the driver a third set of information which is an object is less than 15 feet ahead and the truck speed is less than 2 mph) (col 12, lines 42-48). Therefore, Meing teaches "two sets of information displayed at the same place alternating with the same type of graphics" and further teaches "a graphical difference between said at least two said of information is representative a third set of information".

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kieu D. Vu. The examiner can normally be reached on Mon - Thu from 7:00AM to 3:00PM at 571-272-4057.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached at 571-272-4048.

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

571-273-8300

and / or:

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571-273-4057 (use this FAX #, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper / amendment be faxed directly to them on occasions).

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A handwritten signature in black ink, appearing to read 'Kieu D. Vu', with a stylized, cursive script.

Kieu D. Vu  
Primary Examiner